

REMARKS

Claims 2-17 are currently pending in the present application. Claims 14-17 stand withdrawn from consideration by the Examiner as being directed to a non-elected invention. Claims 3 and 11-13 have been amended by the present amendment. Support for these amendments is provided by the originally filed claims and specification. It is believed that these amendments have not resulted in the introduction of new matter.

Applicants wish to extend their appreciation to Examiner Ronesi for the helpful and courteous discussion held on May 27, 2008, with their undersigned Representative. During the meeting, the prior art rejection was discussed with a particular emphasis on the comparative experimental results presented in the present specification distinguishing an exemplary embodiment of the present invention from the disclosure of Bock, as well as the meaning of the well recognized claim term “structurally modified” pyrogenic silica as understood by skilled artisans as of the filing date of the present application. The content of this discussion is believed to be reflected in the remarks set forth herein.

Applicants respectfully request reconsideration of the withdrawal of claims 14-17 from consideration by the Examiner. The following two criteria must be met in order for a restriction requirement to be proper: (1) the claimed inventions must be independent or distinct; and (2) there must be a serious burden on the examiner if restriction is not required. See MPEP § 803(I). Applicants respectfully submit that neither of these criteria have been met and thus the restriction requirement and the withdrawal of claims 14-17 was improper.

The Official Action dated March 17, 2008, states on pages 2 and 3 that claims 14-17 are independent or distinct from the originally claimed invention and are therefore withdrawn from consideration as being directed to a non-elected invention. Contrary to the Official Action however, the subject matter presented in claims 14-17 finds clear support in original claim 1. As a result, claims 14-17 are not directed to an invention that is independent or distinct from the invention originally claimed.

By virtue of having issued a first Official Action on the merits rejecting original claim 1, it is reasonable to conclude that claims 14-17 have already been treated on their merits with respect to patentability. Accordingly, further examination of claims 14-17 would not impose a serious burden on the Examiner once the restriction requirement and the withdrawal of claims 14-17 is vacated.

Applicants respectfully request that the Examiner vacate the withdrawal of claims 14-17 and either place these claims in condition for allowance, or further examine these claims on their merits for patentability.

The rejection of claims 2-13 under 35 U.S.C. § 102(b) as being anticipated over Bock (U.S. Patent 6,020,419) is respectfully traversed.

Claim 2 recites a lacquer composition comprising: (1) from 5 to 99.5 wt. % of a polymer composition; (2) from 0.5 to 50 wt. % of a silanized, *structurally modified* pyrogenic silica having attached to the surface thereof one or more of the following: (a) alkylsilyl groups according to the molecular formula $\text{SiC}_n\text{H}_{2n+1}$, wherein n is an integer from 2 to 18; (b) dimethylsilyl groups; and (c) monomethylsilyl groups; (3) from 0 to 80 wt. % of one or more solvents; and (4) from 0 to 10 wt. % of an additive.

“Structurally modified” pyrogenic silica, as recited new claim 2, is a term well recognized in the art as meaning pyrogenic silica that has been structurally modified by a rigorous mechanical process such as ball milling, for example.

Pursuant to MPEP § 2164.05(a), not everything necessary to practice the claimed invention need be disclosed in the specification. Based on established U.S. case law, the specification need not disclose what is well-known to those skilled in the art and preferably omits that which is well-known to skilled artisans and already available to the public. See e.g., *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991).

Meyer '531 (U.S. 2005/0241531) describes that structurally modified pyrogenic silica may be obtained by a mechanical process of ball milling, for example, and that the structurally modified pyrogenic silica may then be subjected to an optional post-grinding process using an air jet mill (See e.g., [0022], [0038], [0039], claims 13 and 14).

Meyer '642 (U.S. 2005/0244642) describes that structurally modified pyrogenic silica may be obtained by a mechanical process of ball milling, for example, and that the structurally modified pyrogenic silica may then be subjected to an optional post-grinding process using an air jet mill (See e.g., [0020], [0021], [0027], [0028] and claim 3).

Although Meyer '531 and Meyer '642 were not already available to the public as of the filing date of the present application, these references claim priority to German patent applications filed on August 28, 2002, and therefore reflect the state of knowledge possessed by skilled artisans on and before the filing date of the present application with respect to the term “structurally modified” pyrogenic silica. In fact, this very issue was addressed by inventor Dr. Jürgen Meyer in the enclosed 37 C.F.R. § 1.132 Declaration, which was previously submitted to the Office in the related copending application of Meyer '531.

As further evidenced by the following references, the term “structurally modified” pyrogenic silica was, in fact, well-known to those skilled in the art as of the filing date of the present application.

Meyer '388 (U.S. 2002/0077388) describes that structurally modified silica may be obtained by a mechanical process of destructuring using a ball mill, for example, and that the structurally modified silica may then be subjected to an optional re-grinding process using an air jet mill (See e.g., [0007], [0008] and claim 4).

Nargiello (U.S. Patent 6,193,795) describes that a low structured or destructured pyrogenic metal oxide may be produced by an intense mechanical process of grinding using ball milling, for example (See e.g., abstract, column 1, lines 39-67, column 2, lines 1-8 and 20-23, column 3, lines 34-41, column 5, lines 40-55, claims 1 and 16).

Hartmann (U.S. Patent 5,959,005) describes that destructured silica may be produced by a mechanical process using ball milling, for example, and that the destructured silica may then be subjected to optional air jet milling (See e.g., column 1, lines 35-39, column 2, lines 18-20, claims 2 and 3).

A specific definition of the term “structurally modified” pyrogenic silica was purposely omitted from the present application as being superfluous, since said term was well recognized by skilled artisans as meaning pyrogenic silica that has been structurally modified by a rigorous mechanical process such as ball milling, for example.

In contrast, Bock describes a jet dispersion process for producing a reagglomeration resistant, transparent coating composition comprising a binder resin and pyrogenic silica particles, which are present in an amount of from 0.5 to 25 wt. % based on the weight of the binder resin, wherein the jet dispersion process involves deagglomerating the coating composition by passing the coating composition through a nozzle (See e.g., column 2, lines 50-67, column 3, lines 1-3 and 28-33, claims 1, 3, 4 and 10). Bock also describes utilizing pyrogenic silica that has been surface modified with hydrophobic groups, such as dimethylsilyl groups, which is marketed by Evonik Degussa under the trademark Aerosil R 972 (See e.g., column 3, lines 46-67, claims 5 and 6).

Bock claims priority to German patent application DE 19811790, which is discussed in the present specification (See e.g., page 1, lines 8-17, page 22, lines 3-6, and page 23, lines 2-4). While Bock describes conventional surface modified (not to be confused with “structurally modified”) pyrogenic silica, Bock fails to describe or suggest structurally modified pyrogenic silica, as presently claimed. The jet dispersion process of Bock is equivalent to the optional post-grinding process described in the previously discussed references. Based on a reasonable interpretation of these references, merely subjecting pyrogenic silica to such a jet dispersion process alone is insufficient for imparting structural modification to the pyrogenic silica. Therefore, the claimed structurally modified pyrogenic silica is *fundamentally different* from the conventional pyrogenic silica described in Bock.

This fundamental difference is further substantiated by the direct comparison set forth in Example 4 and Table 6 of the present specification (See e.g., pages 22-24). As evidenced by the comparative experimental data, unlike the structurally modified pyrogenic silica of the claimed lacquer composition, the conventional pyrogenic silica (i.e., Aerosil R 972) of the coating composition of Bock exhibit undesirable orange peel and low scratch resistance on the surface thereof.

As discussed in the present specification, undesirable orange peel is attributable to the conventional pyrogenic silica of the coating composition of Bock negatively affecting the rheology thereof, thereby resulting in highly flawed coating surfaces (See e.g., page 1, lines 8-17). Applicants have discovered that the structurally modified pyrogenic silica of the claimed lacquer composition of the present invention exert negligible effects on the rheology thereof, thereby resulting in high gloss transparent lacquer surfaces that do not exhibit undesirable orange peel (See e.g., page 7, lines 6-26, page 12, lines 7-13, page 24, Table 6 and lines 6-12). Applicants have also discovered that in comparison to the conventional pyrogenic silica of the coating composition of Bock, the structurally modified pyrogenic silica of the claimed lacquer composition of the present invention exhibit superior scratch resistance, as measured by the percentage of residual gloss after being subjected to surface scratching (See e.g., page 7, lines 6-26, page 12, lines 7-13, page 24, Table 6 and lines 6-12).

Therefore, the disclosure of Bock clearly fails to anticipate, or render obvious to a skilled artisan, the presently claimed invention.

Withdrawal of this ground of rejection is respectfully requested.

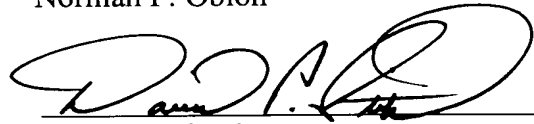
Applicants respectfully request that the provisional obviousness-type double patenting rejections of claims 2, 3, 5 and 10 over: (1) claim 15 of copending application number 10/524,472 (Meyer '642); and (2) claims 17 and 18 of copending application number 10/524,366 (Meyer '531), be held in abeyance, with respect to claims 2-17, until allowable subject matter in the present application is indicated.

The rejections of claims 11-13 under 35 U.S.C. § 112, second paragraph, is obviated by amendment. Withdrawal of this ground of rejection is respectfully requested.

In conclusion, Applicants submit that the present application is now in condition for allowance and notification to this effect is earnestly solicited.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "David P. Stitzel", is written over a horizontal line.

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